रजिस्टर्ड सं०शुडोहुएल-33001/93

REGISTERED NO. DL-33001/93

सं० 241

नई विल्ली, शमिवार, जुन 12, 1993 (ज्येष्ठ 22, 1915)

No. 24]

NEW DELHI, SATURDAY, JUNE 12, 1993 (JYAISTHA 22, 1915)

इस माग में भिन्न पुछ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके [Separate paging is given to this Part in order that it may be filed as a separate compilation]

# भाग III—खण्ड 2 **IPART III—SECTION 21**

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्अन्धित अधिसूचनाएं और नोटिस [Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE

PATENTS AND DESIGNS

Calcutta, the 12th June 1993

# ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial Jurisdiction on a zonal basis as shown below:-

Patent Office Branch Todi Estates, III Floor, Lower Parel (West), Bombay-400 013.

The States of Gujarat, Maharashtra and Madhya Pradesh and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch, Unit No. 401 to 405, III Floor, Municipal Market Building, Saraswati Marg, Karol Bagh, New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

1-107GI/93

Telegraphic address "PATENTOPIC"

Patent Office Branch, 61, Wallajah Road, Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office. (Head Office), "NIZAM PALACE", 2nd M.S.O. Building, 5th, 6th and 7th Floor, 234/4, Acharya Jagadish Bose Road, Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees: The fees may either be paid in cash or may be sent by Money Order payable to the Controller at the appropriate Offices or by bank draft or cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

# 

# एकस्य सथा अभिकल्प

कलकता, दिनांक 12 जुम 1993

इंट्रंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पैटोट कार्यालय का प्रधान कार्यालय कलकता में अवस्थित हैं तथा कम्बर्ध, दिल्ली एवं मदास में इसके शाखा कार्यालय हैं, जिनके प्राद्वितिक क्षेत्राधिकार जीन के आधार पर निम्न रूप में प्रदक्षित हैं:---

पेटांट कार्यालग शासा, टोडी इस्टेंट, तीसरा तल, लोजर परेल (पिश्चम), पम्बद्ध-400013।

गुजरात. महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोआ, समन तथा दीव एवं सादरा और नगर हवेली ।

तार पता---"पटाफिस""

पेटोट कार्गालय शासा, एकक मं 401 से 405, तीसरा तल, गर्यपालिका बाजार भवन, धर्वनी मार्ग, करोल बाग, नहीं किल्ली-110005 ।

हरियाणा, हिमाचल प्रदोश, जम्मू सथा कश्मीर, पंजाब, राजस्थान सथा उत्तर प्रदोश राज्य क्षेत्रों एवं गंग शासित क्षेत्र संक्षीगढ तथा दिल्ली ।

लार पता-- 'पेट टाफिक''

पंटांट कार्यालय शाखा, 61, वालाजाह रोड, महास-600002 ।

आन्ध्र प्रवेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासिन क्षेत्र पाण्डिचेरी, लक्षव्यीप, मिन्निकाय तथा एमिनिटिवि द्वीप ।

तार पता--"पटेरीफस"

पेटोंट कार्यालय (प्रधान कार्यालय), निजाम पैलेस, दिवतीय बहुत्तलीय कार्यालय, भवन 5,6 तथा 7वां सल, 234/4, आचार्य जगदीश बोस रोड, फलकत्ता-700020 ।

भारत का अवशेष क्षेत्र । नार पता---"पटेट्स"

पेटाँट अधिनियम, 1970 या पेटाँट नियम, 1972 में अपे-क्षित सभी आवेदन पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटाँट कार्यालय को केवल उपयुक्त कार्यालय में ही प्राप्त किए आएंगे।

श्रूक :--श्रूकों की अदायगी या तो नकद की आएगी अथवा उपयक्त कार्यालय में भियंत्रक की भृगतान योग्य धनादश अथवा डाक आदश या जहां उपयुक्त कार्यालय अवस्थित हैं; उस स्थान के अनुसूचित बैंक से नियंत्रक की भूगतान योग्य बैंक ड्राफ्ट अथवा चैक द्वारा की जा सकती हैं।

# APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE, 234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

Calcutta, the 12th June 1993

The dates shown in the crescent brackets are the dates claimed under Section 135, of the Patents Act, 1970.

### The 04th May 1993

- 254/Cal/93. The Mead Corporation. Top Gripping Bottle Carrier.
- 255/Cal/93. Siemens Aktiengesellschaft. Forced once— Through Steam Generator.

#### The 05th May 1993

- 256/Cal/93. Robert Wilhellm Heillger. Piston Cylinder device with a protective coating and method of producing such a coating.
- 257/Cal/93. Lee Hoong Thye, Eldon. Improved Door Construction.

(Convention No. 9210187.2; dated 12-05-92; U. K.).

#### The 07th May 1993

258/Cal/93. Kabelmetal Electro Gesellschaft Mit Beschrankter Taftung. Process for continuous longitudinal seam welding of metal bands to form pipes, by using DC ARC Welding device, and an improved circuit for use in such device.

# The 10th May, 1993

- 259/Cal/93. Avner Geller. Laminato useful as packaging material and its manufacture.
- 260/Cal/93. Lechler GmbH. 4 Co. KG. An arrangement for the supplying of liquid and air to a binary nozzle.
- 261/Cal/93. Elpatronic AG. Can seam coating process and apparatus.
- 262/Cal/93. Ormat Inc. Power Augmentation of a gas turbines by inlet air chilling.

# The 11th May 1993

- 263Cal/93. Dr. Nanigopal Jana. A process of preparing a homocopathic medicinal composition.
- 264/Cal/93. Phillips Petroleum Company. Alkylation Process.
- 265/Cat/93. Union Nationale Des Groupements De Distallaterurs d'Alcoole (UNGDA). The use of polyether Ionophore antibiotics in alcohol Fermentation.
- 266/Cal/93. Hitachi, Ltd. Electrically insulated coils and a method of manufacturing thereof.
- 267/Cal/93. The Babcock & Wilcox Company. Circulating fluidized bed reactor with internal primary particle separation and return.

# APPLICATNION FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002.

#### The 26th April 1993

278/Mas/93. B. Bhuvaneswaran. Top seeds game.

279/Mas/93. Sree Chitra Tirunal Institute for Medical Sciences & Technology. A process for the preparation of a visible light cured composite for dental restorative purposes.

280/Mas/93. Mederer Jens. Piston engine.

281/Mas/93. Andrej Zatler and Franco Eferl. Level switch.

282/Mas/93. Ovonic Battery Company, Inc. Metal hydride cells having improved cycle life and charge retention.

283/Mas/93. Rachman Gunawan. Push and pull type cylinder lock.

#### The 27th April 1993

284/Mas/93. Astra Research Centre India. A process for preparing a novel, labelled hybridization probe and uses thereof.

285/Mas/93. Asea Brown Boveri Ltd. Filter silencer.

286/Mas/93. Sedapro. Tire mold and method of molding the tire.

287/Mus/93. Energy Biosystems Corporation. Process for the desulfurization and the desalting of fossil fuels.

288/Mas/93. Chi Chung Isai. Parking tower.

289/Mas/93. Rajagopal Ramesh and Ramesh Jyothsna. An improved apparatus and method for making ice.

#### The 28th April 1993

290/Mas/93. Astra Research Centre India. A process for the production of heterologous peptides.

291/Mas/93. IDL Chemicals Limited. 'Raydet Relay'—a new delay device for delay blasting.

292/Mas/93. Clive Neal Taylor. Tool, pipe fittings and method of securing a pipe to such fittings. (May 2, 1992; United Kingdom).

293/Mas/93. Lonza Ltd. A microbiological method of producing malonyl-7-aminocephalosporanic acid derivatives.

#### The 29th April 1993

294/Mas/93. Solar Cells, Inc. Process and apparatus for making photovoltaic devices and resultant product.

# ALTERATION OF DATE U/S. 16

172330

Filed on 20 Jun 1989.

(528/Del/89)

Ante-dated to 19 Aug 1986.

# COMPLETE SPECIFICATIONS ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month apply for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents at the appropriate office on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta or the appropriate Branch Office on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by two to get the charges as the copying charges per page are Rs. 2/-.

# स्वीकृत सम्पूर्ण विनिद्देश

एतद्वारा यह सूचना की जाती है कि सम्बद्ध आवंदनों में से किसी पर पेटोट अनुदान का विरोध करने के दुष्क के कोई व्यक्ति, इसके निर्गम की तिथि से चार (4) महीने या आग्रम ऐसी अवधि जा उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटोट नियम, 1972 के तहत विहित प्रपत्र 14 पर आवंदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्व को उपर्युक्त कार्यालय को ऐसे विरोध की सूचना विहित प्रपत्र 15 पर दे सकते हैं। विरोध सम्बन्धी लिखित बक्तव्य, उक्त सूचना के साथ अथवा पेटोट नियम, 1972 के नियम 36 में यया विहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

"प्रत्येक विनिद्धिक के संदर्भ में नीचे दिए वर्गीकरण, भार-तीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप हाँ।"

रूपांकन (चित्र आरोखों) की कोटो प्रतिया यदि कोई हो, के साथ विनिद्देशों को टेकित अथना फोटो प्रतियो की आपूरित पेटेंट कार्यालय, क्लाकता अथना उपयुक्त शाखा कार्यालय द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय से पत्र व्यवहार द्वारा सूनिश्चित करने के उपरांत उसकी अदायगी पर की जा सकती हैं। विनिद्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिद्देश के सामने नीचे विणित चित्र आरोख कार्यों को जोड़कर उसे 2 से गुणा करके (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 2/- रु. हैं) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Ind. Cl.: 40 Al IV(1)

172311

Int. Cl. : F 16C-1/00, 5/00, F 16J-12/00.

#### PRESSURE VESSEL SYSTEM.

Applicant: UNION CARBIDE CORPORATION, MANUFACTURERS, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA, OF OLD RIDGEBURY ROAD, DANBURY, STATE CONNECTICUT, 06317, UNITED STATES OF AMERICA.

Inventor: PHILIP RICHARD BLACKBURN.

Application for Patent No. 132/DEL/88 filed on 17 Feb 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

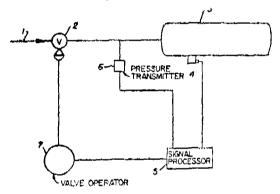
#### 3 Claims

A pressure vessel system comprising :

- a pressure vessel (3),
- a conduit (8) for the supply of pressurizing fluid (1) to said pressure vessel (3),
- a valve (2) on said conduit (8) for regulating the flow of fluid (1) through said conduit (8) to said pressure vessel (3),
  - valve operating means (7) connected to said valve (2) for activating the operation thereof,

characterised in that :

an acoustic emission sensor (4) is provided on said pressure vessel (3) electrically connected to an acoustic emission signal processor (5), said signal processor (5) being electrically connected between a pressure transmitter (6) and said valve operating means (7), said pressure transmitter (6) being in turn connected to said conduit (8) at a point between said valve (2) and said pressure vessel (3) for reading the pressure in said vessel (3), whereby the signal representative of the pressure in said vessel (3) read by the said pressure transmitter (6) is passed to said signal processor (5), which processes said signal and passes it, in turn to said valve operating means (7) which acts to open or close said valve (2).



(Compl. speen, 13 pages.

Dig. 1 sheet)

Ind. Cl.: 68 D

Int. Cl.4: HO 2 J 3/00.

AN UNINTERRUPTIBLE POWER SUPPLY DEVICE.

Applicant: KABUSHIKI KAISHA TOSHIBA, A JAPANESE CORPORATION, OF 72, HORIKAWA-CHO, SAIWAIKU, KAWASAKI-SHI, KANAGAWD-KEN, JAPAN.

Inventor: CHIHIRO OKADO.

Application for Patent No. 147/Del/88 filed on 23-2-1988.

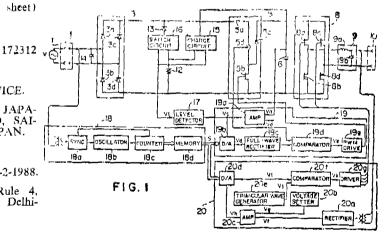
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 2 Claims

An uninterruptible power supply device comprising:

- a rectfier circuit (3) connected to a chopper circuit (5) with filter circuit (6) for rectifying power from a commercial power source to obtain a d.c. voltage;
- a battery (12) is connected to a switch circuit (16) and charge circuit (15) for delivering a d.c. voltage when the said power source is in an abnormal state;
- said chopper circuit (5) having a reactor and a switching element connected to a switch circuit (16) through diode (13) to convert said d.c. voltage to a second d.c. voltage;

- a power synchronizing circuit (18) is connected to said commercial power source, said chopper control circuit (19) and an inverter control circuit (20) for generating a sine wave signal in phase with said power from said commercial power source;
- a chopper control circuit (19) is connected to said chopper circuit for carrying out on-off control of said switching element in said chopper circuit in synchronism with said sinc wave signal;
- an inverter circuit (8) having a plurality of switching elements which are bridge-connected to said commercial power source through diode bridge and said chopper circuit to convert said second d.c. voltage to an a.c. voltage having the same frequency as that of said commercial power source; and
- an inverter control circuit is connected to the said inverter circuit for carrying out on-off control of said respective switching elements in synchronism with said sine wave signal,
- characterized in that said chopper control circuit comprises:
- first error detector means (19a) is connected to an output of said chopper circuit for detecting error between said output of said chopper circuit and first reference voltage set in advance;
- a first multiplier circuit (19b) which is connected to a digital-to-analog (D/A) a converter circuit (19b) a full wave rectifier circuit (19c) which is connected to a comparator (19d) and the said comparator circuit is connected to a PWM drive circuit (19c) for allowing the FET (5b) to be subjected to switching;
- wherein said inverter control circuit comprises second crror detector means for detecting an error between said a.c. voltage and a said second reference voltage, a second multiplier circuit (20d) is connected to a voltage detecting circuit (20a) which detects the a.c. voltage and a voltage setter circuit (20b) for inputting said error and said sine wave signal to output a voltage reference signal, a second drive circuit (20g) is connected to said inverter circuit (8) for carrying out on-off control of said switching elements in said inverter circuit in accordance with voltage reference signal.



(Compl. speen, 33 pages.

Drgs. 8 sheets)

Ind. Cl.: 9 D & E

172313

Int. Cl. : B 23 K—9/00, 9/26, 35/00, 35|04.

A METHOD FOR THE MANUFACTURE OF LOW CARBON ALLOY STEEL BODY.

Applicant: WELD MOLD COMPANY.

Inventor: MATT KIILUNEN.

Application for Patent No. 148/Del/88 filed on 23 Feb 1988.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-110 005.

Appropriate office for opposition proceedings (Rule 4, Patent Rules 1972) Patent Office Branch, New Delhi-

#### 3 Claims

A method for the manufacture of a low cerbon alloy steel body which comprises creating an arc between a base metal of the kind as herein described and an electrode tip to produce a liquid weld metal, said electrode tip being constituted by a cluster electrode of a flux coated central low carbon steel rod electrodes, and cooling said liquid weld metal to produce a low carbon alloy steel body having substantially the following composition:

Ingredient					From About	& To About	& Weight
Carbon					0.01	to	0.15
Manganese		•			0.50	to	2.00
Silicon				-	0 05	to	1.00
Chromium			•	-	0.50	to	5.00
Molybdenu	Πì				0.25	to	2.50
Nickel					0 50	to	5,00
Tungsten					0.25	to	1 50
Vanadium						upto	1 50
Columbium	ì					upto	1 00
Cobalt		•	•	•		upto	2.00

and the balance being iron, characterised in that said flux coating on said rod electrodes have substantially the following composition:

Ingredient					From & About	To &	Weight
Manganese			•		2	to	12
Silicon					2	to	10
Iron ·					5	to	35
CaCo3				•	20	to	60
CaF2		-		-	8	to	35
Chromium			•		3	to	12
Silicate ·					5	to	15
Molybdenur	n		•		0.05	to	10
Tungsten		•			0.10	to	10
Nickel		•			0.10	to	15
Titanlum ·		-				upto	15
Vanadium				٠		upto	3

(Compl. speen. 10 pages).

Ind. Cl.:  $32F(2a) \rightarrow [1X_{7}(1)]$ 

172314

Int, Cl.: C07C 87/54.

PROCESS FOR THE PREPARATION OF 4-NITRODIPHENYLAMINES.

Applicant: BAYER AKTIENGESELLSCHAFT, A BODY CORPORATE ORGANISED UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, OF LEVERKUSEN, BAYERWERK, FEDERAL REPUBLIC OF GERMANY.

Inventors: CHIRARANJAN PODDER and HARRO SCHLESMANN,

Application for Patent No. 151/Del/88 filed on 26-2-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-

#### 6 Claims

 $\Lambda$  process for the preparation of 4-nitrodiphenylamines of formula (I) of the drawings

wherein R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are identical or different and stand for hydrogen or an alkyl group having 1 to 9 carbon atoms, said process comprises reacting halogen nitrobenzenes of formula (II) of the drawings

wherein X stands for chlorine or bromine and R<sup>1</sup> and R<sup>2</sup> have the meanings indicated above, with aromatic amines of formula (III) of the drawings

wherein R<sup>n</sup> and R<sup>4</sup> have the meanings indicated above, along with formanilides of formula (IV) of the corresponding amines (III) of the drawings

wherein R³ and R¹ have the meanings indicated above, at a temperature in the range of 140 to 225°C and in the presence of potassium carbonate and copper compounds such as herein described, said copper compounds being in an amount from 0.001 to 0.1 mol and said potassium carbonate and copper compounds such as herein described, said copper compounds being in an amount from 0.001 to 0.1 mol and said potassium carbonate is used in the equialent quantity or upto 1.5 times the equivalent quantity, based on the halogen nitrobzenzene of formula (II) of the drawings.

(Compl. specn. 14 pages

Drg. 1 sheet)

Ind. Cl.: 188

172315

Int. Cl.4: C 22 C-10/28, 20/08, 30/00. FOID-5/28.

A METHOD OF PRODUCING A PROTECTIVE COAT-ING ON A TITANIUM ALLOY BLADE.

Applicant: ALSTHOM, A FRENCH BODY CORPORATE, OF 38 AVENUE KLEBER 75784 PARIS CEDEX 16, FRANCE.

Inventor: ANDRE COULON,

Application for Patent No. 153/Del/88 filed on 29-02-1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-

#### 3 Claims

A method of producing a protective coating on titanium alloy blade comprising despositing on the portion of the blade to be coated a layer of pure vanadium powder at a temperature which is 50°C higher than the melting point of vanadium, depositing a layer of heterogenous powder constituted by 30% to 33% of the weight of said powder as being titanium carbides, titanium nitrides of the powder has being titanium carbides, titanium intrides of the powder has being titanium carbides, titanium intrides of the powded by a martensitic or austenomarten. powder as being infamiliar carolides, infamiliar infines of thanium borides bonded by a martensitic or austenomartensitic stainless steel containing 9% to 18% chromium on said vanadium layer at a temperature which is 50°C 100°C greater than the melting point of said heterogenous powder and less than the melting point of vandium, thereby producing a protective coating on said titanium allow blade.

(Compl. specn. 7 pages

Drgs. 2 sheets)

Ind. Cl.: 129 J

172316

Int. Cl. : B 21 D-1/00.

AN IMPROVED ROLLING MILL.

Applicant: MORGAN CONSTRUCTION COMPANY, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF MASSACHUSETTS, UNITED STATES OF AMERICA, OF 15 BELMONT STREET. WORCETER, MASSACHUSETTS 01605, UNITED STATES OF AMERICA OF AMERICA.

Invento: : ALEXANDER IAN WILSON.

Application for Patent No. 157/Del/88 filed 01-03-1988.

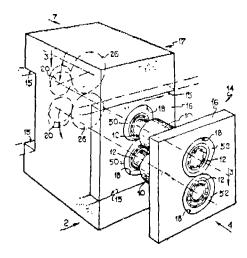
Convention date 04 Mar 1987/8705042 & 8705043/U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-

### 11 Claims

An improved rolling mill comprising a roll housing (14), a pair of cylindrical work rolls (10, 10) rotatable in said roll housing (14), a main frame and gear housing 17), respective drive gears (20, 20) located within said main frame and gear housing (17) and drivably connected to said work rolls (10, 10) respective pinnons 26, 26) located within said main frame and gear housing (17) and in constant mesh with the respective drive gears (20, 20) said pinions (26, 26) meshing together and the respective drive gears being adjusted towards or away from each other to provide the spacing of the said rolls (10, 10) in the roll housing (14), by orbital adjustments of said drive gears (20, 20) around the respective pinions (26, 26), an actuator (92) for locating the main frame and gear housing (17) i neither one of the two positions angularly spaced at 180 degrees and pivotal clamping plates (64) for re-adjusting the drive gears 20, 20 and pinions 2(6, 26) within the main frame and gear housing (17) are provided so that the drive gears are brought into mutually meshing positions and the pinions (26, 26) is mutually meshing positions and the pinions (26, 26) is moved apart from their mutually meshing positions to

become the gear with which the rolls (10, 10) are drivably connected.



(Comp. Specn. 24 pages

Drwgs 7 sheets)

172317

Ind. Cl.: 39 N

Int. Cl.: C 22 B 3/02, 21/00.

APPARATUS FOR CONTROLLING THE PROCESS OF PRODUCTION OF AN ALUMINATE SOLUTION FROM BAUXITE.

Applicant: VSESOJUZNY NAUCHNO- ISSLEDOVATELSKY I PROEKTNY INSTITUT ALJUMINIEVOI, MAGNIEVOI I ELEKTRODNOI PROMYSHLENNOSTI, OF SREDNY PROSPEKT, 86, LENINGRADE. U.S.S.R.

Inventors: ALEXANDR VASILIEVICH BOGDANOV, STANISLAV VLADIMIROVICH BURDO, YAKOV DAVYDOVICH GANZBURG, ANATOLY YAKOVLEVICH EVSJUKOV, ALEXANDR IVANOVICH ISAEV, ROBERT GJRSHEVICH LOKSHIN, NATALIA ANATOLIEVNA EINGORN.

Application for Patent No. 160/Del/88 filed on 1 Mar 1988.

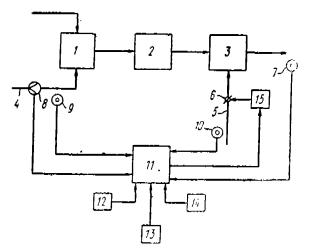
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-

#### 3 Claims

Apparatus for controlling the process of production of an aluminate solution from bauxite, comprising the following units mounted in series along a production line:

- crusher unit, (1) fed simultaneously with bauxite and a caustic solution through respective channels therefor connected to said crusher unit, a digester unit for the bauxite pulp obtained from the crusher unit and a unit for diluting the digested pulp from the digester unit with wash water fed through a wash water channel connected to said diluter unit;
- an aluminate solution density transducer located at the n aluminate solution density transducer located at the output of the diluter unit, said aluminate density trasducer having an output connected to an input of a computing unit, said computing unit having an output connected to a control unit, said control unit being connected to an aquating member mounted in the wash water channel for regulating wash water fed to the diluter unit, said caustic solution supply channel having a caustic solution flow rate transducer and a caustic solution density transducer mounted therein, said caustic solution flow rate transducer and said caustic solution density transducer having respective outputs connected to transducer having respective outputs connected to respective further inputs of said computing unit, said computing unit having still further inputs which are connected to corresponding setter means

for adjusting the density and flow rate of the caustic solution fed to said crusher unit.



(Compl. specn, 16 pages

Drg. 1 sheet)

Ind. Cl.; 102 D

172318

Int. Cl. : EO 5C 7/00.

HYDRAULIC DOOR OPENING AND CLOSING DEVICE.

Applicant: VERTRAN MANUFACTURING COMPANY, A CORPORATION ORGANISED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF THE STATE OF FI.ORIDA, UNITED STATES OF AMERICA, OF 1761 WEST HILLSBORO BOULEVARD, SUITE 201, DEERFIELD BEACH, FLORIDA 33441, UNITED STATES OF AMERICA.

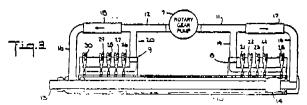
Inventor: NICKOLAS RIBAUDO.

Application for Patent No. 162/Del/88 filed on 2 March 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

# 4 Claims

- A door opening and closing device comprising:
  - a hydraulic pump having a first and a second port,
  - first and second fluid lines connected to the first and second ports respectively and each fluid line branching into a first and second branch line,
  - a barrel having two ends and a plurality of valved openings linearly disposed along the length of the barrel, two of said valved openings located at each end of the barrel fluidly communicating with one of the branch lines of one of the fluid lines through a directional flow valve,
  - first and second manifolds fluidly coupled at a respective end respectively to another branch line and located at each end of the barrel such that each manifold fluidly communicates with the barrel through a portion of the plurality of valved barrel openings,
  - a piston fluidly sealed within the barrel driven along the length of the barrel by fluid pressure and
  - a rod connected to the piston and coupled to door outside the barrel at one end of the barrel.



Ind. Cl. : 150 D

172319

Int. Cl.: E 21 B 33/00,

#### A COMPOSITE ANNULARLY SEALED PIPELINE.

Applicants: ARROW OIL TOOLS, INC. OF P.O. BOX 7700450; TULSA, OKLAHOMA 74170, UNITED STATES OF AMERICA, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATES OF DELAWARE, U.S.A.

Inventors: MARK LEWIS WYATT.

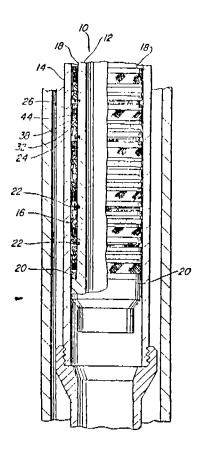
Application for Patent No. 169/Del/88 filed on 7 March 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

#### 18 Claims

A composite annularly sealed pipeline for a well-bore composed of an outer conduit within said well-bore and an inner conduit axially disposed within said outer conduit, the annular space between said conduits being sealed by means of a sealing device carried by said inner conduits, said sealing device comprising:

a plurality of longitudinally extending seal stacks, said seal stacks being separated from an adjacent seal stack by a retaining ring fixedly secured to the inner conduit, said seal stack comprising a plurality of annular seal members having at least one elastometric seal member and at least one backup seal member provided to prevent extrusion of said elastometric seal member.



(Compl. specn. 28 pages 'Drgs. 8 shets)

(Compl. specn. 15 pages

Ind. Cl.: 39-N

172320

Int. Cl.4: C 09C1/26

AN IMPROVED PROCESS FOR THE PREPARATION OF IRON BLUE PIGMENT.

Applicant: COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110 001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventor: TURAGA PRABHAKARA PRASAD.

Application for Patent No. 262/DEL/88 filed on 30 March 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 001.

#### 6 Claims

An improved process for the preparation of iron blue pigment with excellent settling, filtering and washing properties which comprises treating a dilute iron (II) salt solution with an alkali ferrocyanide in the presence of a mild reducing agent at ambient temperatures and oxidizing the resultant white precipitate by bubbling air there through adding a coagulating agent such as herein described, settling, decantating filtering, drying the residue and pulverising it to the desired size.

(Complete specification 5 pages).

Ind, Cl.: 107 C

172321

Int. Cl. : F 02 B 19/00.

TWO-STROKE INTERNAL COMBUSTION ENGINE.

Applicant: TAI-HER YANG, OF 5-1 TAIPIN STREET, SI-HU TOWN, DZAN-HWA, TAIWAN, A CITIZEN OF TAIWAN.

Inventor: TAI-HER YANG.

Application for Patent No. 934/DEL/86 filed on 22nd October, 1986.

Convention date 23rd Oct, 1985/8526129/U.K. & 6th Nov. 1985/8527317/U.K. /

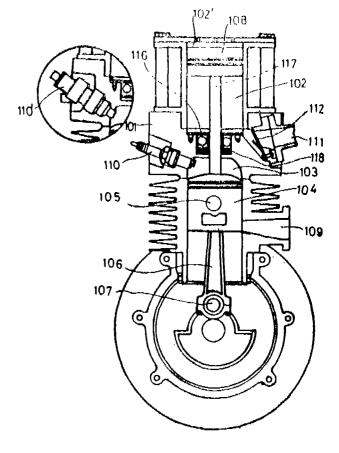
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, New Delhi-110 005.

# 3 Claims

A two-stroke internal combustion engine comprising:

- a cylinder body, having therein at least one power piston and cylinder therefor and at least one precompression piston and cylinder therefor, each said power piston and its cylinder being located coaxially, with respect to a said pre-compression piston and its cylinder, the power piston being connected by a connecting rod to a crank-shaft for converting reciprocal motion of the power piston into rotational output of said crankshaft;
- an exhaust port for discharging exhaust gases from the power cylinder when the power piston is in the region of bottom dead-centre;
- an inlet port having a one-way valve in communication with at least that auxiliary cylinder adjacent the power cylinder;
- a gas transport passage interconnecting said power cylinder and an adjacent auxiliary cylinder;
- a valve for controlling transportation of gas through the gas transport passages, and means for igniting a fuel gas mixture in each said power cylinder or for injecting fuel into each said power cylinder characterised in that the power cylinder or cylinders and the auxiliary cylinder or cylinders are located

in pairs separated by separating walls, and a coaxial connection rod interconnecting the said pistons passing through said separating wall or walls, and synchronisation means for controlling operation of the gas control valve for permitting the passage of gas when the power piston is in the region of bottom dead-centre.



(Compl. specn. 25 pages

Drgs. 27 sheets)

Ind. Cl.: 188

172322

Int. Cl.4: C23C 18/32.

METHOD AND APPARATUS FOR THE PRODUCTION OF ELECTROLYTICALLY PLATED ARTICLES.

Applicants: BURLINGTON INDUSTRIES, INC., CORPORATONI ORGANISED UNDER THE LAWS OF THE STATE OF DELAWARE, UNITED STATES OF AMERICA, OF 3330 WEST FRIENDLY AVENUE, GREENSBORO, NORTH CAROLINA 27420, UNITED STATES OF AMERICA.

Inventors: RODGER, LOTTS GAMBLIN, JOHN ARNOLD LIGHTENBERGER, NANCY F., MYERS, DAVID JAMES SUGG.

Application for the Patent No. 477/DEL/87 filed on 3rd June 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act 1972) Patent Office Branch, New Delhi-110005.

#### 17 Claims

A method for the production of an electrolytically plated article of the kind such as herein described said plating comprising a nickel or nickel-cobalt phosphorus alloy which comprises:

(a) immersing said article as a cathode within an electrolytic bath;

- (b) immersing an anode within said bath; and
- (c) applying an electrical potential across said anode and cathode; characterised in that said bath comprises on a molar basis from 1.0 to 3.0 phosphorous acid, from 0.1 to 0.61 phosphoric acid, from 0.5 to 1.3 nickel or nickel and cobalt said nickel being constituted by rickel and cobalt said nickel being to 1.3 nickel or nickel and cobalt said nickel being constituted by nickel carbonate and/or nickel chloride and said cobalt by cobalt chloride and from 1 to 2 chlorine and in that the anode current density is maintained at a minimum of from 200 amperes per square foot whereby the build-up of the free acid content of the bath is restrained and the bath life significantly increased.

Apparatus for the production of an electrolytically plated article of the kind such as herein described which comp-

an electrolytic bath;

a workpiece constituted by the article to be plated disposed within said bath as a cathode;

an anode likewise disposed within said bath; and

a source of electrical power connected to said anode and cathode for applying electrical potential there-

characterised in that said bath has the composition defined in any of claims 1 to 9 and in that said anode comprises a plurality of widely spaced members of a material of the kind such as herein described supported by or provided on a metal bus.

(Compl. Specn. 38 Pages;

Drwgs. 3 sheets)

Ind. Cl.: 61H (VIII)

172323

Int. Cl.4: F 26B 3/347

#### A MICROWAVE DRIER.

Applicant: NEARCTUC RESEARCH CENTRE (AUSTRALIA) LIMITED, OF 10 POPE STREET, RYDE, NEW SOUTH WALES, 2112, AUSTRALIA, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF NEW SOUTH WALES, COMMONWEALTH OF AUSTRALIA

Inventor: ALLAN REGINALD FRY.

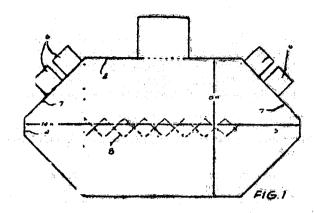
Application for Patent No. 489/DEL/87 filed on 8th June 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act 1972) Patent Office Branch, New Delhi-110005.

#### 5 Claims

A microwave drier comprising a cavity (1) having at least two parallel and opposing surfaces (2, 3) separated by a predetermined distance and at least two opposing end plates, a processing zone located at the intersection between each pair of said inner surfaces and said end plates (11, 12) respectively in which the material to be dried/heated is placed, a ducting means (9) connected to the top of said cavity for the extraction of moist air from said cavity, at least one sloping upper side plate mounted in said cavity, and at least one microwave energy source (6) mounted on said at least one sloping upper side plate so that cross coupling of microwave energy occurs with maximum number of resonance modes in said processing zone (8) and minimum 2-107GI/93

resonance mode and reflected energy at said at least one microwave source.



(Compl. Specn. 11 Pages;

Drwgs. 4 Sheets)

Ind. Cl.: 190 A

172324

Int. Cl.\*: F 01 K 19/00

#### A POWER GENERATING STEAM TURBINE.

Applicant: KORTING HANNOVER AKTIENGESELLS-CHAFT, OF BADENSTEDTER STRASSE 56, 3000 HAN-NOVER 91, FEDERAL REPUBLIC OF GERMANY, A COMPANY ORGANISED AND EXISTING UNDER THE LAWS OF FEDERAL REPUBLIC OF GERMANY.

Inventors: ALFRED JUNIOR WALTER AUMANN.

Application for Patent No. 693/DEL/87 filed on 7th August, 1987.

Appropriate office for opposition proceedings (Rule 4, Patent Act 15.2) Patent Office Branch, New Delhi-110005.

#### 2 Claims

A power generating steam turbine comprising

a multistage steam turbine (4) having a feed end and an exhaust end,

a steam boiler (1) for feeding steam to said feed end of said steam turbine,

a turbine condenser (18) connected to said exhaust end of said steam turbine condensing the exhaust steam and having an evacuation end,

a condensate pump returning the condensate from said condenser to said steam boiler via one or more feed water heaters the water sides of which being fed with exhaust steam condensate from said turbine condenser and the steam sides of which being connected to corresponding extraction steam lines of the steam turbine,

a heat exchanger the water side of which is connected in series between said condensate pump and the first of said feed water heaters and having an inlet and an outlet at condensing side,

a suction pump having a suction and a discharge end, the suction end of which being connected to the outlet of said heat exchanger and the discharge end leading into atmosphere,

a steam jet compressor (30) provided with a suction end, a discharge end and a motive end, the suction end being connected to said evacuation end of said turbine condenser, the discharge end being connected to the inlet of said heat exchanger (22), and characterised in that said motive end of said steam jet compressor being connected to that turbine steam extraction line which has the lowest bleed steam pressure next to the exhaust pressure of the steam turbine.

(Compl. Specn. 12 Pages;

Drwg. 1 Sheet.)

172325

Ind. Cl.: 146 D,

Int. Cl.4: H04N 5/00.

DIGITAL IMAGE AQUISITION SYSTEM.

Applicant: ZONE TECHNOLOGY PVT. LIMITED OF SUIT 7, 41-45 RICKARD ROAD, BANKSTOWN NEW SOUTH WALES, 2220, COMMONWEALTH OF AUSTRALIA, A COMPANY INCORPORATED UNDER THE LAWS OF THE STATE OF NEW SOUTH WALES, COMMONWEALTH OF AUSTRALIA.

Inventors: ATILA AKNAR & ANDRE SOUSSA.

Application for Patent No. 984/DEL/87 filed on 17 Nov. 1987

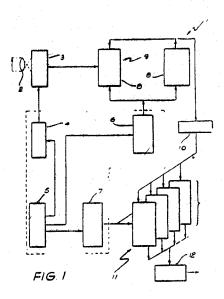
Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 7 Claims

A digital image acquisition system for use as a sensor at a remote location, the sensor having a degree of decision making autonomy with respect to an alternative location when linked for communication with the alternative location, the system having:

- (a) an image pick-up means (20, 30, 40, 22, 24) for converting image information to electrical frame information;
- (b) storage means (32, 46, 50) connected to said image pick-up means (20, 30, 40, 22, 24) and for storing said electrical frame information as a stored digital image.
- (c) decision making means (32, 48, 50) connected to said storage means (32, 46, 50) and for processing the stored digital image in accordance with a predetermined decision making sequence to arrive at one of a plurality of possible conclusion signals concerning the image; and
- (d) communication means (60, 62, 66, 68, 70, 72, 74) connected to said decision making means (32, 48, 50) and for enabling communication of an output from the system to the alternative location, said output being dependent on said one

conclusion signal from said decision making means (32, 48, 50).



(Compl. Specn. 21 Pages

Drwg 8 Sheets)

Ind. Cl.: 39 N.

Int. Cl4: C09C 3/06.

172326

IMPROVED PROCESS FOR THE PREPARATION OF BRUNSWICK GREENS.

Applicant: COUNCIL OF SCINTIFIC & INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors: TURAGA PRABHAKARA PRASAD, ADDAŁA SURYANARAYANA & KODAVANTI VENKATA KASIPATI RAO.

Application for Patent No. 1133/DEL/87 filed on 28 Dec. 1987.

Complete Specification left on 16 MAR 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### 2 Claims

An improved process for the preparation of Brunswick Greens which comprises of preparing separate solutions containing upto 10% weight/volume of (1) sodium dichromate, sodium carbonate and sodium sulphate; (2) sodium ferocyanide; (3) iron (II) sulphate of chloride; and adding these solutions simultaneously to a solution, having pH 3 to 5, containing water, lead nitrate, an organic acid such as herein discribed and the sodium salt of the same acid, with constant stirring, continuing the stirring for a period of 1 to 3 hours in presence of air, for slow oxidation, allowing the precipitate, washing, drying and pulverising the resultant dried product

(Provisional Specification 5 pages)
(Complete Specification 5 pages)

Ind. Cl.: 206 E LX II.

172327

Int. Cl.4: G 06 F 3/00.

DUAL CLOCK SHIFT REGISTER.

Applicant: SILICONGRAPHICS, INC., A CORPORA-TION ORGANISED AND EXISTING UNDER THE LAWS OF THE STATE OF CALIFORNIA, UNITED STATES OF AMERICA, OF STIERLIN ROAD, MOUNTAIN VIEW, CALIFORNIA 94043 UNITED STATES OF AMERICA.

Inventor: MARK REGIUS HANNAH.

Application for Patent No. 30/DEL/88 filed on 14th January, 1988.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### (Claims 6)

A dual clock shift register comprising:

a first shift register (151) having at least two registers (154, 154+1...n), a first register (154) and second register (154+1), each register (154) storing one of two logical states, a first logical state and a second logical state, and each having an output (Q) and a clock signal input (CLK), each of said clock signal inputs (CLK) being coupled to a first clock source (OCK) to receive a second clock rate, said output (Q) of said first register (154) being coupled to an input (D) of said second register (154+1), said first register (154) having a data input (D) coupled to a signal source to receive a signal set at said first logical state, and said registers (154) each having a clear signal input coupled to a clear signal source for receiving a clear signal to store said second logical state in said registers (154);

a plurality of multiplexers (152) including at least two multiplexers, a first multiplexer (155) and a second multiplexer (158) each having a first multiplexer input (237) and a second multiplexer input, said first multiplexer input (237) coupled to a second clock source (ICK) to receive a signal corresponding to a first clock rate and said second multiplexer input being coupled to said first clock source (OCK) to receive a signal corresponding to said second clock rate, said first (155) and second multiplexers (158) having their own select lines which are coupled respectively to the outputs (Q) of said first and second registers, (154, 154+1) said multiplexers (155, 158) each having an output (No number) producing an output that depends on the logical value on the select line (SL) of each multiplexer (155, 158), each of the output signals of said multiplexers (155, 158) corresponding to either the first clock rate or the second clock rate;

a second shift register (153) having at least two registers, a third register (156) and a fourth register (157), each having a clock input (CLK), the cleck inputs (CLK) of said thirid and fourth register (156, 157) being coupled respectively to the outputs (No numbers) of said first and second multiplexers (155, 158), said third register (156) and said fourth register (157) each having an input (D) and an output (Q), the output (Q) of said third register (156) being coupled to said input (D) of the fourth register (157), wherein the logical state of the output (Q) of said first register (154) determines the state of the clock input (CLK) of said third register (156) and the logical state of the output (Q) of said second register (154+1...n) determines the state of the clock input

(CLK) of said fourth register (157), whereby said third register (156) may be clocked at a different rate than said fourth register (157).

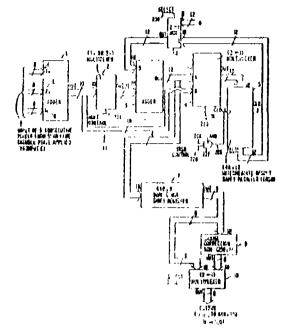


Fig. 3

(Complete Specification 61 pages drawing sheets 10).

Ind. Cl.: 98 I.

172328

Int. Cl.\*: F03G 7/00. F24J 2/00.

A FIXED MIRROR LINE-FOCUS SOLAR CON-CENTRATOR WITH CYLINDRICAL MIRROR ELEMENTS.

Applicant: TATA ENERGY RESEARCH INSTITUTE, a Society registered under the Indian Societies Registration Act, 1980, of No. 7, Jor Bagh, New Delhi-110 003, and Tata Institute of Fundamental Research, Homi Babha Road, Bombay-400 005, Research Institution of the Deptt. of Atomic Energy, Government of India.

Inventors: V. BALASUBRAMANIAN & GOVIND SWARUP.

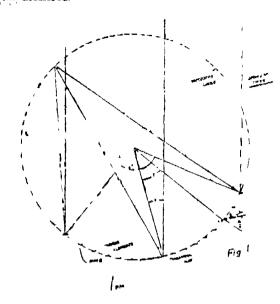
Application for Patent No. 63/DEL/88 filed on 27 Jan 1988. Complete Specification left on 28 Apr 1989.

Appropriate office for opposition proceedings (Rule 4, Patente Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### (Claims 7)

A fixed mirror kne-focus solar energy concentrator with cylindrical mirror elements comprising a concentrating reflector and a heat receiver or absorber at the focal line of the concentrating reflector for collecting the focussed solar energy, characterized in that said reflector comprises a plurality of cylindrical mirror elements (STM) provided between end supports (SS), said cylindrical mirror elements being stretched under tension, said mirror elements being inter-connected by means of kinks (LNL), intermediate supports (IS) being provided for supporting said mirror elements (STM), said

heat receiver or absorber having an apertute with a width as herein described.



(Provisional Specification 9 Pages).

(Complete Specification 22 Pages Drawing sheets 4).

Ind. Cl.: 39L & N. 70A & Cs.

172329

Int. Cl. : C01B 11/14

S.enU<sub>F</sub> z13wu fixed C25B 1/26.

ELECTROCHEMICAL CELL FOR THE ELECTROLY-TIC PREPARATION OF MAGNESIUM CHLORATE AND A PROCESS USING THE SAID CELL.

Applicant: COUNCIL OF SCIENTIFIC AND INDUST-RIAL RESEARCH, Rafi Marg, New Delhi-110 001, India, an Indian registered body incorporated under the Registration of Societies Act (Act XXI of 1860).

Inventors: KAILATHUVALAPPIL INNIRI VASU, KAPIS-THALAM CHETLUR NARASIMHAM, SUBRAMANIAN PUSHPAVANAM AND SWAMINATHAN MOHAN.

Application for Patent No. 598/DEL/88 filed on 13 Jul 1988. Complete Specification left on 17 Feb 1989.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

#### (Claims 11)

An electrochemical cell for the electrolytic preparation of magnesium chlorate from magnesium chloride which comprises an anode, a rotating cathode and an electrolyte containing 80—450 g/L magnesium chloride with or without sodium or magnesium or lithium dichromate in the range of 0.5 to 4.0 g/L and a pH between 4.5 to 6.8, the anode being lead dioxide coated graphite (GSLD) or titanium substrate lead dioxide (TSLD) or a noble metal oxide based titanium anode and in the form of cylindrical structure having perforations or expanded mesh type or strips positioned in a circular arrangement, the cathode being a cylindrical rod or hollow pipe closed at both ends, the cathode being positioned concentrically to anode, with an interelectrode distance of 0.5 to 1.5 cm, the cathode being rotatable and given electrical connection.

A process for the electrolytic preparation of magnesium chlorate for magnesium chloride which comprises electrolysing magnesium chloride containing 80—450 g/L with or without sodium or magnesium or lithium dichromate in the range of 0.5 to 4.0 g/L having pH between 4.5 to 6.8 at a temperature

in the range of 50—80°C in an electrochemical cell as described above using anode current density 5-25 A/dm<sub>2</sub> & cathode current density between 5—40A/dm<sup>2</sup> and cathode rotation at a velocity between 15 to 120 metre/min.

(Provisional Specification 6 Pages).

(Complete Specification 8 pages).

Ind. Cl.: 40 B.

172330

Int. Cl.: C01B 31/00.

A PROCESS FOR THE PREPARATION OF A CATALYST FOR USE IN CATALYTIC SHIFT REACTIONS.

Applicant: IMPERIAL CHEMICAL INDUSTRIES PLC., A BRITISH COMPANY, OF IMPERIAL CHEMICAL HOUSE, MILLBANK, LONDON SWIP 3JF, ENGLAND.

Inventors: GLYN DAVID SHORT, GODFREY CHARLES CHINCHEN AND JAMES GEORGE WILLIAMSON.

Application for Patent No. 528/Del/89 filed on 20 Jun 1989.

Divisional to Appln. No. 747/Del/86 filed on 19 Aug 1986.

Ante-dated to 19 Aug 1986.

Convention date 30 Aug 1985/8521650/U.K.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110 005.

### (Claims 4)

A process for the preparation of a catalyst for use in catalytic shift reactions, which comprises, reducing in any known manner, a precursor consisting of a calcined intimate mixture of finely divided oxides of copper, zinc, magnesium and aluminium, at least said copper, zinc and magnesium oxides having been introduced by coprecipitation, the proportion of magnesium oxide being such that the magnesium atoms constitute 0.2 to 7% of the total number of copper, zinc and magnesium atoms in the precursor and the proportion of aluminium oxide is such that the aluminium atoms constitute 3 to 30% of the total number of metal atoms in the precursor.

(Complete Specification 15 pages)

# PATENT SEALED ON 14-05-93

169194 169365 169481 169601 169732\* 170038 170050 170240\*D 170241 170263 170267 170305 170311\*D 170313\*F 170314\*F 170316\*F 170358 170385 170891\* 171293.

Cal-04, Mas-12, Del-02 & Bom-02.

\*Patent shall be deemed to be endorsed with the words "LICENCE OF RIGHT" Under Section 87 of the Patents Act. 1970 from the date of expiration of three years from the date of sealing.

D-Drug Patent, F-Food Patent.

#### RENEWAL FEES PAID

149063 149884 150454 150636 151351 151999 152928 153807 154769 155036 155175 155291 155323 155878 155894 155924 156018 156174 156311 156336 156598 156750 157275 157419 157626 157641 157645 157812 157829 158098 158509 159123 159251 159401 159473 159599 159720 159722 159831 159832 159848 160118 160246 160299 160302 160306 160319 160401 160413 160498 160499 160809 161063 161085 161255 161266 161775 161891 161952 162031 162150 162266 162575 162655 162781 162843 162882 162918 162943 163029 163055 163300 163367 163412 163458 163617 163704 163845 164027 164028 164393 164400 164407 164677 164711 164741 164822 164912 165093 165249 165513 165541 165656 165945 166043 166061 166194 166453 166454 166500 166596 166694 166720 166850 166868 166946 166948 167051 167091 167098 167112 167144 167147 167149 167171 167175 167184 167182 167183 167193 167195 167242 167272 167507 167560 168658 169102 169109 169199 169244 169260 169262 169270 169273 169311 169318 169319 169321 169323 169343 169362 169366 169367 169423 169467 169468 169493 169517 169530 169570 169593 169604 169622 169624 169651 169723 169724 169725 169755 169778 169779 169784 169845 169891 169911 169931 169938 169981 169985 169 170017 170020 170052 170147 170179.

#### CESSATION OF PATENTS

 156586
 161638
 166199
 166928
 167076
 168984
 165165
 165168

 165170
 165171
 165177
 165181
 165193
 165195
 165198
 465200

 165210
 165211
 165218
 165230
 165231
 165237
 165243
 165248

 165252
 165265
 165271
 165274
 165275
 165294
 165304
 165325

 165345
 165346
 165347
 165355
 165356
 165363
 165366
 165374

 165378
 165380
 165383
 165389
 165396
 165400
 165402
 165409

 165412
 165417
 165418
 165419
 165420
 165434
 165437
 165441

 165442
 165444
 165466
 165461
 165462
 165485
 165486

 165493
 165502
 165517
 165524
 165559
 165560
 165566
 165579

 165595
 165600
 165601
 165601
 165612
 165613
 1656

#### RESTORATION PROCEEDINGS

Notice is hereby given that an application for restoration of Patent No. 162430 dated the 7th December 1984 made by

Krupp Koppers GmbH on the 16th November 1992 and notified in the Gazette of India Part III, Section 2, dated the 30th January 1993 has been allowed and the said patent restored.

Notice is hereby given that an application for restoration of Patent No. 162656 dated the 7th December 1984 made by Krupp Koppers GmbH on the 16th November 1993 and notified in the Gazette of India Part III, Section 2, dated the 16th January 1993 has been allowed and the said patent restored.

Notice is hereby given that an application for restoration of Patent No. 162921 dated the 6th February 1986 made by emilio ambasz on the 22nd December 1992 and notified in the Gazette of India Part III, Section 2, dated the 6th February 1993 has been allowed and the said patent restored.

# REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries is the date of registration of the designs included in the entry.

- Class 1. No. 164972. Khaitan (India) Ltd., Indian Company of 46C, J. L. Nehru Road, Calcutta-700071, W.B., India. "Table Fan". November 11, 1992.
- Class 3. Nos. 164780 & 164781. Indian Mohan Lal of Paliwal Bhawan, Paliwal Nagar, Sanjay Gandhi Chowk, Panipat-132103, Haryana, India, Indian. "Educational Appliance". September 10, 1992.
- Class 3. No. 164959. Rattan Kumar Mukherjee of Block H-5, Flat No. 11, Laboni Estate, Salt Lake, Calcutta-700064, W.B., India, Indian, "Tyre for rope-way pulley". November 11, 1992.
- Class 3. No. 165337. Chinar Trust of C-37, Connaught Place, New Delhi-110001, India. "Ice Cream Maker". February 15, 1993.
- Class 8. No. 164802. Sajjan Kumar Bajaj of 13, Krishna Market, Amritsar-143006, Punjab, India. "Blanket". September 18, 1992.

R. A. ACHARYA
Controller General of Patents, Designs
and Trade Marks